



## **Corrigendum to** **“Comparison of observation- and inventory-based methane emissions for eight large global emitters”** **published in Earth Syst. Sci. Data, 16, 4325–4350, 2024**

**Ana Maria Roxana Petrescu<sup>1</sup>, Glen P. Peters<sup>2</sup>, Richard Engelen<sup>3</sup>, Sander Houweling<sup>1</sup>,  
Dominik Brunner<sup>4</sup>, Aki Tsuruta<sup>5</sup>, Bradley Matthews<sup>6</sup>, Prabir K. Patra<sup>7,8,9</sup>, Dmitry Belikov<sup>9</sup>,  
Rona L. Thompson<sup>10</sup>, Lena Höglund-Isaksson<sup>11</sup>, Wenxin Zhang<sup>12</sup>, Arjo J. Segers<sup>13</sup>,  
Giuseppe Etiope<sup>14,15</sup>, Giancarlo Ciotoli<sup>16,14</sup>, Philippe Peylin<sup>17</sup>, Frédéric Chevallier<sup>17</sup>, Tuula Aalto<sup>5</sup>,  
Robbie M. Andrew<sup>2</sup>, David Bastviken<sup>18</sup>, Antoine Berchet<sup>17</sup>, Grégoire Broquet<sup>17</sup>, Giulia Conchedda<sup>19</sup>,  
Stijn N. C. Dellaert<sup>20</sup>, Hugo Denier van der Gon<sup>20</sup>, Johannes Gütschow<sup>21</sup>, Jean-Matthieu Haussaire<sup>4</sup>,  
Ronny Lauerwald<sup>22</sup>, Tiina Markkanen<sup>5</sup>, Jacob C. A. van Peet<sup>1</sup>, Isabelle Pison<sup>17</sup>, Pierre Regnier<sup>23</sup>,  
Espen Solum<sup>10</sup>, Marko Scholze<sup>12</sup>, Maria Tenkanen<sup>5</sup>, Francesco N. Tubiello<sup>19</sup>, Guido R. van der Werf<sup>24</sup>,  
and John R. Worden<sup>25</sup>**

<sup>1</sup>Department of Earth Sciences, Vrije Universiteit Amsterdam, 1081HV, Amsterdam, the Netherlands

<sup>2</sup>CICERO Center for International Climate Research, Oslo, Norway

<sup>3</sup>European Centre for Medium-Range Weather Forecasts (ECMWF), Reading, RG2 9AX, UK

<sup>4</sup>Empa, Swiss Federal Laboratories for Materials Science and Technology, 8600 Dübendorf, Switzerland

<sup>5</sup>Finnish Meteorological Institute, P.O. Box 503, 00101 Helsinki, Finland

<sup>6</sup>Climate Change Mitigation and Emission Inventories, Umweltbundesamt GmbH, 1090, Vienna, Austria

<sup>7</sup>Research Institute for Humanity and Nature, Kyoto 6038047, Japan

<sup>8</sup>Research Institute for Global Change, JAMSTEC, Yokohama 2360001, Japan

<sup>9</sup>Center for Environmental Remote Sensing (CEReS), Chiba University, 1–33 Yayoicho, Inage Ward, Chiba, 263-8522, Japan

<sup>10</sup>Norwegian Institute for Air Research (NILU), Kjeller, Norway

<sup>11</sup>International Institute for Applied Systems Analysis (IIASA), 2361 Laxenburg, Austria

<sup>12</sup>Department of Physical Geography and Ecosystem Science, Lund University, 223 62 Lund, Sweden

<sup>13</sup>Department of Climate, Air and Sustainability, TNO, Princetonlaan 6, 3584 CB Utrecht, the Netherlands

<sup>14</sup>Istituto Nazionale di Geofisica e Vulcanologia, Sezione Roma 2, via V. Murata 605, Rome, Italy

<sup>15</sup>Faculty of Environmental Science and Engineering, Babeş-Bolyai University, Cluj-Napoca, Romania

<sup>16</sup>Consiglio Nazionale delle Ricerche, Istituto di Geologia Ambientale e Geoingegneria, Via Salaria km 29300, 00015 Monterotondo, Rome, Italy

<sup>17</sup>Laboratoire des Sciences du Climat et de l'Environnement, 91190 Gif-sur-Yvette, France

<sup>18</sup>Department of Thematic Studies – Environmental Change, Linköping University, Linköping, Sweden

<sup>19</sup>Statistics Division, Food and Agriculture Organization of the United Nations, 00153 Rome, Italy

<sup>20</sup>Department of Air Quality and Emissions Research, TNO, Utrecht, the Netherlands

<sup>21</sup>Climate Resource, Northcote, Australia

<sup>22</sup>Université Paris-Saclay, INRAE, AgroParisTech, UMR ECOSYS, 9120 Palaiseau, France

<sup>23</sup>Biogeochemistry and Modeling of the Earth System, Université Libre de Bruxelles, 1050 Brussels, Belgium

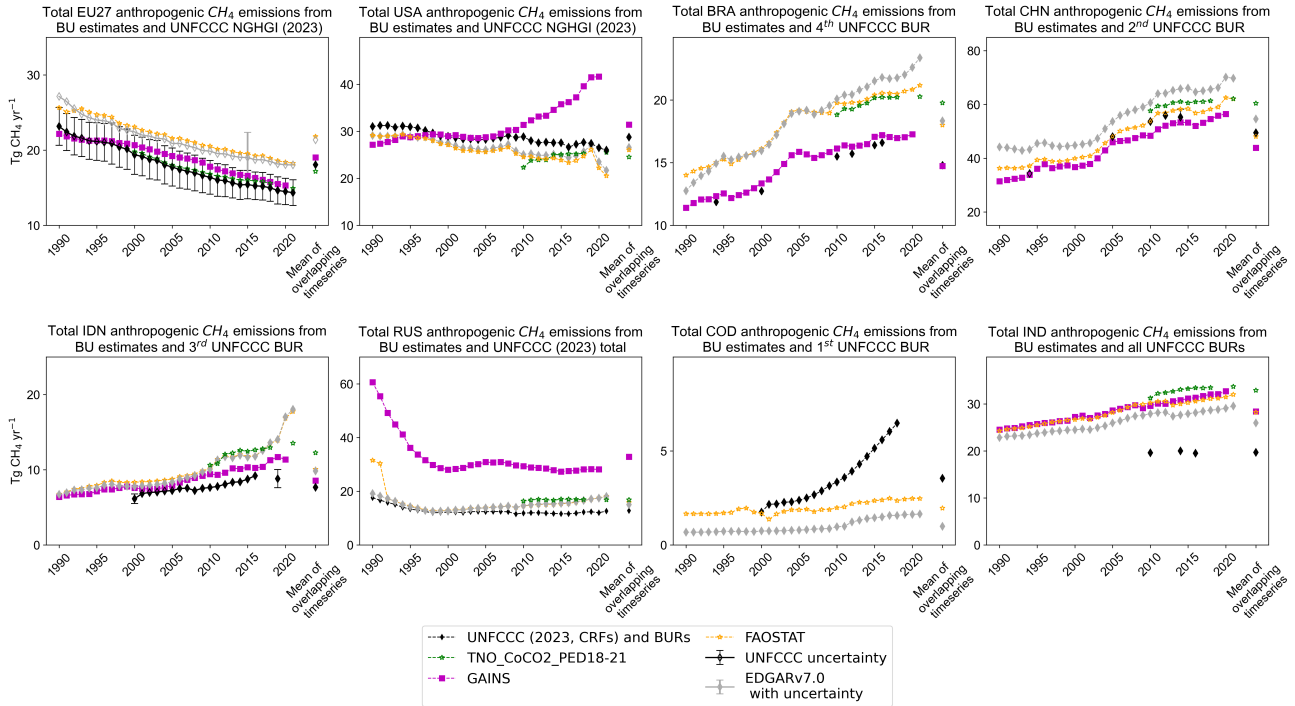
<sup>24</sup>Meteorology and Air Quality Group, Wageningen University and Research, Wageningen, the Netherlands

<sup>25</sup>Jet Propulsion Laboratory, California Institute of Technology, Pasadena, CA, USA

**Correspondence:** Ana Maria Roxana Petrescu (a.m.r.petrescu@vu.nl)

Published: 2 December 2024

It came to our attention that Fig. 3 in the above-mentioned paper was not updated with the TNO dataset for the final publication. The corrected Fig. 3, including the TNO\_CoCO2\_PED18-21 time series, can be found below.



**Figure 3.** Total anthropogenic CH<sub>4</sub> emissions (excluding LULUCF) from bottom-up (BU) inventories, UNFCCC NGHGI (2023) of CRFs (the EU, the USA, and Russia) and BURs (Brazil (fourth in 2021), China (second in 2019), Indonesia (third in 2021), DR Congo (first in 2022), India (all three BURs: 2016, 2018, and 2021)), and four other global datasets, EDGAR v7.0, GAINS (no IPPU), FAOSTAT/PRIMAPHist (except for AFOLU), and TNO\_CoCO2\_PED18-21. For the EU, the relative error on the UNFCCC value represents the NGHGI (2023) reported uncertainties computed with the error propagation method (95 % confidence interval) and gap-filled to provide respective estimates for each year. China reports uncertainties for 2014, and Indonesia reports uncertainties for 2000 and 2019. Total COD UNFCCC BUR emissions do not include IPPU. The EDGAR v7.0 uncertainty is only for 2015 and was calculated according to Solazzo et al. (2021) for EDGAR v5.0. The mean of overlapping time series was calculated for 1990–last available year as follows: 2021 for UNFCCC NGHGI (2023), EDGAR v7.0, FAOSTAT/PRIMAP-hist, and TNO\_CoCO2\_PED18-21 and 2020 for GAINS.